INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF MATHEMATICS
CLASS IX
WORKSHEET NO. 6

## SECTION A: (1 MARK)

1. Find the area of a triangle having base 6 cm and altitude 8 cm . $24 \mathrm{~cm}^{2}$
2. Two sides of a triangle are 13 cm and 14 cm and its semi- perimeter is 18 cm . Find

9 cm the third side.
3. Find the area of an equilateral triangle with side $2 \sqrt{3} \mathrm{~cm}$.
(NCERT
$3 \sqrt{3} \mathrm{~cm}^{2}$ Exemplar)
SECTION B: (2 MARKS)
4. Find the area of a triangle when $\mathrm{a}=3 / 2 \mathrm{~cm}, \mathrm{~b}=5 / 2 \mathrm{~cm}$, and $\mathrm{c}=2 \mathrm{~cm}$
$1.5 \mathrm{~cm}^{2}$
(CBSE 2011)
5. The perimeter of an isosceles triangle is 32 cm . The ratio of the equal side to its base in 3:2. Find the area of the triangle.
6. Find the area of a rhombus whose one side is 20 m and one diagonal is 24 m .
$384 \mathrm{~m}^{2}$

## SECTION C: (3 MARKS)

7. In a rectangular field of dimensions $50 \mathrm{~m} \times 30 \mathrm{~m}$, a triangular park is constructed. If the dimensions of the park are $14 \mathrm{~m}, 15 \mathrm{~m}$ and 13 m . Find the area of the remaining field.
(NCERT Exemplar)
8. The semi-perimeter of a triangle is 132 cm . The product of the difference of semiperimeter and its respective sides is $13200 \mathrm{~cm}^{3}$. Find the area of the triangle.
9. Find the area of a parallelogram whose adjacent sides are 10 cm and 12 cm and one of its diagonal is 14 cm .

## SECTION D: (3 MARKS)

10. The lengths of two adjacent sides of a parallelogram are 17 cm and 12 cm . One of its 180 cm 2 , diagonal is 25 cm long. Find the area of the parallelogram. Also find the length of the 15 cm altitude from vertex on the side of length 12 cm .
(2016)
11. If each side of any triangle is doubled then find the percentage of increase in its area. $300 \%$
12. Calculate the area of the shaded region

